

SUMMARY RECORD (PLENARY SESSION)

NAVIGATION SAFETY ADVISORY COUNCIL (NAVSAC)

TENTH MEETING

NOVEMBER 10-11, 1995

ST. LOUIS, MISSOURI

1. BACKGROUND

On call of its Sponsor, Rear Admiral Rudy K. Peschel, and after public notice in the Federal Register (60 FR 53228), the eleventh meeting of the Navigation Safety Advisory Council was held on November 10-11, 1995, in St. Louis, Missouri. This report summarizes the Council's deliberations, conclusions and actions during the two-day session. The proceedings of the plenary session held on November 11, 1995, at the Holiday Inn Convention Center were recorded and a written transcript prepared. Subject to Section 552 of Title 5, United States Code, the records, reports, transcripts, minutes, appendices, working papers, draft studies, agenda and other documents which were made available to and/or prepared by the Council are available for public inspection and copying at the office of the Executive Director, Margie G. Hegy, U.S. Coast Guard (G-MVO-3), 2100 Second Street SW, Washington, DC 20593-0001. An attendance list is attached as Appendix I.

2. OPENING OF MEETING

Chairman Anthony Fugaro called the meeting to order at 8 a.m. on Friday, November 10, 1995. RADM Peschel swore in six new members (Alvin Cattalini, Gretchen Grover, Stephen Hung, John Ralston, Allison Ross, and Gary Welsh) and Chairman Fugaro for an additional term. RADM Peschel administered the following oath:

"I (state your name), make this pledge, to serve the needs of the national objectives, by supplying my energies, experience, and insight, to situations in need of resolution, for the betterment of safety and multiple use of maritime resources. I will do so selflessly, in synergistic spirit with my colleagues, and will collectively provide necessary reports to the Secretary."

The opening remarks and the Executive Director's status report were followed by information briefs on:

- (1) District 2 - Western River Bridge Pier Marking Quality Action Team (QAT) Report
Roger K. Weibush, Chief, Bridge Branch, Second Coast

Guard District, St. Louis, MO.

- (2) Prevention Through People Implementation -
CDR Mark VanHaverbeke, Ship Design Branch, USCG Headquarters
- (3) American Waterway Operators' Responsible Carrier Program
Paul Werner, AWO Mid-Continent Vice President, St. Louis, MO

After these briefings, a River Navigation Panel presented the following information:

- (4) Managing the Inland Waterways System
CAPT James A. Smith, Chief, Operations Division, Second Coast
Guard District, St. Louis, MO
- (5) River Navigation/Role of Electronic Chart Display &
Information System (ECDIS) in River Navigation
Chris Brinkop, Vice President, River Operations, ACBL and
Chairman, Towing Safety Advisory Council
- (6) U.S. Army Corps of Engineers, and ECDIS on the Rivers
Dr. Larry Daggett, Chief, Navigation Division
Army Corps of Engineers, Vicksburg, MS

Three committees, Human Factors in Navigation Safety, Barge Lighting, and Prevention Through People, met on Friday afternoon. Chairman Fugaro reconvened the Council in plenary session at 8 a.m. on Saturday, November 11, 1995, to hear committee reports. This document summarizes this plenary session.

3. COMMITTEE REPORTS

- A. HUMAN FACTORS IN NAVIGATION SAFETY COMMITTEE (members and participants appear in Appendix II).

Captain Rodney Gregory reported as Chairman of the Committee. The Committee was charged with reviewing the revision of the Safety of Life at Sea Convention (SOLAS) Chapter V to ensure that human factors are taken into account in the installation and use of integrated bridge systems and the development of a new code, indicating areas where the U.S. should promote a certain outcome with respect to human factors and integrated bridge systems. Mr. Christopher Young, U.S. Coast Guard, went over the revisions with the Committee and highlighted those areas dealing with human factors as they relate to integrated bridge systems.

After reviewing the materials, the Committee reported that most of the regulations were: (a) too vague and general; (b) need more specifics to provide clarity; and, (c) in some cases tried to cover issues they should not cover, such as seaworthiness. Other

issues discussed were the standardization of equipment displays on an integrated bridge system and interconnectivity of the different subsystems which comprise the integrated bridge system.

The Committee made the following specific recommendations:

- (1) Regulation 16, part A - What did the writers mean by "physical and mental capabilities." The Committee recommended that the Coast Guard go back to IMO and ask that this be rewritten to provide clarification of this term.
- (2) Regulation 17 - list of things to be considered fine until you get to "social adaptiveness." Writers need to clarify what this means.
- (3) Regulation 17, page 12 - The Committee emphasized the need for standard displays, standard characters or symbols on the knobs and switches so the mates and pilots, or anybody who comes aboard, is not searching around trying to figure out each piece of equipment.
- (4) Committee feels that manufacturers who design integrated bridge systems should be doing so with the one-man watch in mind.
- (5) Regulation 18, Part B - Committee agreed it needs to be more specific and suggested rewording to read: "The bridge system shall enable the vigilance to be maintained at all times and shall facilitate access of information required by the navigation officer." The Committee had a problem with the term "workload" as it was subject to many interpretations.
- (6) Regulation 20, Part B - Committee decided certain portions under "General Requirements of System Design" were unnecessary, specifically as they relate to classification of a ship as unseaworthy because of equipment malfunction.
- (7) Regulation 25, paragraph 9 - After looking at the NTSB report on the ROYAL MAJESTY, the Committee recommended the following rewording: "Equipment performing the functions in this regulation forming part of an integrated navigation system, should be so arranged that failure of one subsystem is brought to the immediate attention of the user by audio and visual alarms, and does not cause the failure of any other subsystem."

At the conclusion of the Committee report, the following motion was made and passed unanimously with exceptions noted by Mr. Sheetz:

[95-08] The Council approves the report of the Human Factors in Navigation Committee (HUM-11/95) regarding SOLAS Chapter 5 amendments and sends it to the Coast Guard for consideration.

B. BARGE LIGHTING COMMITTEE (members and participants appear in Appendix II).

CDR Ann Sanborn reported as Chairman of the Committee. The Committee was tasked with preparing a report, to be presented to the full Council in plenary, which would bring members up-to-date on the 70 responses to the Federal Register Request for Comments (60 FR 24598) on this issue. The report was to identify the issues, address key issues, and negate the need for each Council member to read each comment. Other Coast Guard advisory councils (Towing Safety Advisory Council (TSAC), National Boating Safety Advisory Council (NBSAC), Houston-Galveston Safety Advisory Council (HOGANSAC), and the Lower Mississippi River Safety Advisory Council (LOMRSAC)) were consulted on this issue and provided input for NAVSAC consideration.

The comments were broken down into the following general groupings:

- (1) Offshore commercial operators (includes commercial tug and barge operations and deep sea vessels);
- (2) Inland Tug and Tow Operators; and,
- (3) Recreational Boaters.

Four responses came from deep sea vessels, with two of these from the Great Lakes. A fair number of responses came from the tug boat industry as a whole. Over half the responses came from recreational users. Key problem areas that were repeatedly brought up were prioritized. The issues at the top of the list were the most frequently mentioned.

The primary comments from the commercial sector as to problems with collision, specifically between recreational boaters and tug boats, was poor knowledge of the rules. Also tied to this was the poor marine education of the recreational boater. Drug and alcohol abuse were also mentioned fairly often. There was one comment that mentioned poor visual radio watch; one that mentioned poor types of equipment either on the commercial or recreational vessel; and one that mentioned flaws with the Navigation Rules.

The solutions offered by the commercial sector were the need for certification -- licensing of the recreational boater -- as a way

to deal with the education problem and lack of knowledge of the rules. One commenter felt that recreational boaters should be subject to the same drug and alcohol regulations as the professional mariner. And, with respect to the poor visual and radio watch, no solutions were offered. In the equipment area, a number of things came up. The number one recommendation was to enforce the existing lighting regulations. Another recommendation was that the masthead lights, referring to going with a clear system of two and three white masthead lights, should actually be all around lights. The flaws in the Navigation Rules referenced the fact that vessels under tow, sail, and oars show the same lights - sidelights, stern light - and this causes confusion. Regarding poor visibility of lights, individuals felt that the visibility of lights needs to be increased and the special flashing light should be visible from the stern for deep sea vessels under tow.

Analysis of these comments revealed differences geographically. The number one complaint from inland water operators was drug and alcohol abuse, followed by poor understanding of the rules and then, flaws in the rules. The use of unapproved portable lights on vessels, such as people using yellow cautionary highway lights and rough duty household bulbs, was also brought up. People were also concerned about the portable lights because they are not required to meet the vertical sector requirements in the annex of the Inland Navigation Rules.

No solutions were offered to resolve the alcohol and drug abuse problem. Education and licensing of operators of recreational craft were recommended solutions to resolve the lack of understanding of the Navigation Rules. Eliminating the use of unapproved lights was perceived as a solution to the flaw in the Navigation Rules. Suggestions were made that changes be made to allow the white towing masthead lights to be shown below Baton Rouge.

The predominant number of comments came from the recreational boating community who identified a lot of problems, most focusing on equipment. The number one complaint was dim lights, not bright enough to be seen. Second to that, was no lights. They never saw the lights. There were references to lights being recessed along the sides of barges, long distance between lights, and tug and tow lights being obscured by the barge. Another commenter relayed an experience of near collision because he couldn't distinguish the lights from the background lights and didn't realize that a tug and barge were near. Circumstances also occurred when the presence of a hawser was not realized.

Operation issues also came up in the comments from the recreational user. Low height of eye on the smaller boats and

high speed of some of the boats were also cited as problems. And, at the very bottom of the recreational user list, you find the lack of understanding of the rules and alcohol abuse, which were at the top of the commercial users' list.

Solutions offered to resolve the equipment problem were to light the sides of barges, put reflective strips on the barges, and attach white lights to the hawser. There was no consensus. Suggestions from people who admitted that they couldn't identify the circumstances they were in said there was a need for more voluntary education. With regard to operation, some commenters suggested speed limits. No suggestions were offered to resolve the alcohol problem.

Collectively, the problem areas were categorized into three broad areas: education, compliance (enforcement and the vertical sector requirement), and recommended changes. Based on the comments and recommendations received from the public, the Committee concluded that more information was needed to clarify the core of the barge lighting issue. After extensive discussion, the Council passed the following resolutions presented by the Barge Lighting Committee:

[95-09] NAVSAC requests that the Coast Guard explore uniform recreational boater education and advise NAVSAC of corrective action, including current education programs.

(Motion adopted with one abstention.)

[95-10] NAVSAC requests that the Coast Guard explore uniform licensing program for recreational boaters.

[95-11] NAVSAC requests that BSAC and TSAC provide NAVSAC input on the BUI/BWI issue.

[95-12] NAVSAC requests that the Coast Guard provide an evaluation of data from incident reporting, identifying root causes of collisions between recreational boaters and towing vessels.

[95-13] NAVSAC requests that the Coast Guard clarify the applicability of the navigation lighting requirements of 46 CFR to uninspected vessels.

[95-14] NAVSAC requests that the Coast Guard advise them on the feasibility of portable lanterns to meet vertical sector requirements.

[95-15] NAVSAC requests that the Coast Guard check for navigation light compliance during annual and other inspections.

[95-16] NAVSAC requests that the Coast Guard advise NAVSAC as to whether there should be a formal approval process for navigation lights in 33 CFR.

[95-17] NAVSAC requests that the Coast Guard and TSAC advise NAVSAC as to the feasibility and practicality of retro-reflective material for barge markings.

[95-18] NAVSAC requests that the Coast Guard propose that IMO change Rule 24 so that vessels towing astern exhibit three white masthead lights, regardless of the length of the tow.

[95-19] NAVSAC requests that Inland Rule of the Road 24(i) be amended so that vessels towing exhibit the required masthead lights below Baton Rouge.

[95-20] NAVSAC requests that the Coast Guard investigate the feasibility of recommending to IMO that the special flashing light be required on vessels being towed astern.

[95-21] NAVSAC requests that the Coast Guard investigate the feasibility of requiring a special flashing light on inland vessels towed astern and ahead.

C. PREVENTION THROUGH PEOPLE COMMITTEE (Members and participants appear in Appendix II).

Michael Nesbitt reported as Chairman of the Committee. Prevention Through People (PTP) is the initiative the Coast Guard has adopted to recognize and incorporate a people oriented systems approach in addressing critical safety concerns. Captain Nesbitt reported that studies conducted on maritime casualties reveal that only 20% are attributed to technically oriented causes and 80% directly to human factors. The Committee was asked to review the Prevention Through People Quality Action Team Report and develop a specific strategy to handle assessment and coordination of PTP as it relates to navigational safety.

Major discussion points that the Committee felt would have to be addressed later were: near miss programs, definition and understanding of corporate culture (getting management involved, audits of present corporate structure), and unregulated pleasure boaters (legislators do not wish to take the unpopular stand). An additional tasking of the Committee was to get some early wins through short term goals (defined as six to twelve month range) and then define some long term goals (defined as twelve to twenty-four months).

The first short term goal is to have a joint NAVSAC/NBSAC meeting in the Spring. Chairman Nesbitt volunteered to develop a corporate creed using information provided in the PTP report and industry review. Captain Nesbitt plans to gather information from responsible companies and put some of the major points together. He invited NAVSAC members to provide input. The idea is to come up with a creed and put it back out to industry as a starting point. The goal is to develop a program much like AWO's Responsible Carrier Program where base level information can be gathered and used as a communication point with industry.

Gary Welsh volunteered to study/research near miss programs to see if they are actually working. Specific programs mentioned were FAA (NASA), industry, and the Chemical Manufacturers Association (CMA).

Chairman Nesbitt, with the help of absent member Martha Grabowski, wants to coordinate with the QAT on data collection. Gretchen Grover plans to identify communication vehicles to ensure that the PTP message gets out.

Allison Ross volunteered to identify harbor committees and industry organizations to determine who is out there and what they are doing.

Chairman Nesbitt will develop a questionnaire such as the one on page 33 of the PTP QAT Report to gather information. The Committee asked Margie Hegy, the Council's Executive Director to check on possibilities of OMB relief to allow questionnaire.

Long term goals are as follow:

- (1) Boating safety/industry work group that works together and tries to maintain communication and identify problem areas that can be worked on and resolved together;
- (2) Define near miss and unsafe act;
- (3) Identify corporate culture changes;
- (4) Get insurers involved;
- (5) Standardize data collection;
- (6) Establish communication process by publishing data and lessons learned and endorsing and spotlighting success; and,
- (7) Review harbor committee recommendations.

4. BARGE LIGHTING PUBLIC MEETING TESTIMONY.

Time was set aside and announced in the Federal Register to hear public comment on the adequacy of barge lighting. Captain Martin Gould, Jr., New Orleans-Baton Rouge Pilots Association (represents 70 pilots operating between New Orleans and Baton Rouge ports) shared an experience where on one night in a four-hour period he met 12 barges and could spot the barges before he spotted their lights. The distance was a half- to a quarter-mile away on a moonlit night. He indicated that dimness or not being able to see the lights was a real problem for them. This is a very congested area and they need every available edge to ensure safe transit.

Captain Gould feels that the Coast Guard is going to have to make a concerted effort to enforce the regulations. Additionally, the Coast Guard needs to go to the barge fleets and different operators and make them aware of what the lighting requirements are. This information needs to be given to the dispatchers and people in management who make decisions on what is used on the vessel. The Coast Guard needs to aggressively go out and stop the tows and make them fix their lights. This will send a message through the industry to correct these problems. Changing the regulations will require people to spend more money on equipment which they really don't need at this point.

Captain McKamie asked Captain Gould if there's a sense of danger of serious significance and whether he thought it was because the lights were not bright enough or the lights not having correct batteries. Captain Gould replied that yes it was a serious problem that is caused because the two-mile visibility requirement for barge lights is not being complied with. Most are using battery-operated lights, wrong light bulbs and a myriad of other things. Captain Gould feels that educating them first and then following up with enforcement would correct and remedy the situation.

Captain DeHart agreed with Captain Gould that the problem is one of required lighting not being followed. Captain Gould added that the major towing companies are not the problem, it is getting the small operator to comply. It may simply be a lack of knowledge or education, or just cutting corners.

Captain Nesbitt asked the Council members if they encountered the same problem that Captain Gould presented, i.e. seeing the barge before the lights. Captain Ross relayed an incident where one of their pilots hit an unlit tow. It was a huge container barge with an extinguished stern light and the tug's lights were obscured by all the containers. He sunk the barge and almost killed everyone. Half the barges on the Chesapeake Bay are in total compliance. There is no problem with existing

requirements. The problem is when the lights are extinguished and even though the pilots consistently report this to the operator, they don't take corrective action.

Captain Reil agreed with Captain Ross' comments. He said yes, he usually sees the tugs first. It's harder to see the boats. The bigger and better run companies are not the problem, but the smaller outfits don't seem to care as they are cutting corners. The consensus was that the problem was not the lights were inadequate, but rather that the regulations are not being followed.

Captain Alan Richard, Florida Marine Patrol, urged the Council to address the issue straight up. If the lights as presently required under the rules are displayed in full compliance with the present rules, would they be adequate? If the answer is "yes", then you go back and look at enforcement and education. If the answer is "no", then you need to look at some of the other things discussed such as retro-reflective materials on the sides of barges and additional measures.

5. NEW BUSINESS

A. Captain Chris Bohner, Chief, Waterways Management Branch, Eighth Coast Guard District, New Orleans, LA addressed a radio interference problem that is occurring in the Eighth District that they think is national in scope. He asked NAVSAC's assistance by accepting it as an issue they would take up.

Radio interference is a substantial problem in the New Orleans, Baton Rouge corridor on Channel 67 which is the bridge-to-bridge frequency. Captain Bohner feels that the problem is throughout the marine band and is caused by the paging industry. A portion of the marine band is used for pagers and they are allowed to transmit at high output, about 300 watts in the New Orleans area. They are positioned on most of the tall buildings and there are approximately 50 companies between Baton Rouge and New Orleans. There are times when the pilots cannot communicate with the traffic towers or make passing arrangements because of the interference from pagers.

The Eighth Coast Guard District has been aware of the problem for about five years and have written numerous letters to the FCC. FCC's reply has been that it is a local problem and that there is radio equipment available that can filter out the interference. The Coast Guard has found this response inaccurate as they are conducting a study and have not found a radio that can completely eliminate the interference. They are taking some of the complaints, about 350 pages of letters from pilot associations and other mariners in the area, and looking for commonalities.

The Eighth District is also pursuing, through Coast Guard Headquarters, some action such as a study to see if there is an engineering solution to the problem. They are looking at incorporating the interference issue with the VTS 2000 program to see if there is a correlation between the two or if it will cause problems as they move forward with VTS 2000. They have been testing commercially available radios in traffic towers. They are preparing correspondence again to Headquarters Office of Telecommunications to see if they can get the case reopened with FCC. Captain Bohner feels that this is not a local issue, but rather a national issue which will only grow as the pager industry grows. He asked for NAVSAC's help in addressing this issue.

In reply to Captain Reil's question of whether it just occurred on Channel 67, Captain Bohner said no, but because Channel 67 is their bridge-to-bridge frequency they realized it there the most. In response to Captain Pillsbury, Captain Bohner indicated he believes the problem is throughout the entire marine band.

Captain Harvey Wade, Transport Canada, stated that at the RTCM meeting in Petersburg in May, this issue was raised with good representation from U.S. pilots from the Mississippi and New Orleans area. The FCC was lambasted on this issue.

Captain Cattalini asked if the Commandant has been unwilling to help or if Captain Bohner was coming to NAVSAC because the Commandant needed help? Captain Bohner indicated that he was looking for assistance in defining the scope of the problem so they will know how big it is. Right now he is being told by FCC that it is a local problem and the equipment will fix it. He has a problem with going out and telling industry to buy new radios. Several things have been suggested to the FCC. First, to discontinue or no longer issue permits in that frequency range -- get them out of the marine band. They have also asked FCC to delineate what the requirements for new radios should be and put that on the street.

Captain Cattalini further asked if the Commandant has gone to FCC and complained, and what happened? And if he hasn't, why not, and why are you coming to NAVSAC instead of the Commandant? Captain Bohner said the Commandant has gone to FCC and they said it is being handled at the local level. So now they want to go back to the Commandant and tell him exactly what they are up against. Captain Bohner is coming to NAVSAC to get information to take back to the Commandant.

Captain DeHart said his company has three boats that run between the lower Mississippi River up to mile 167. Two of the three

boats are equipped with one of the best VHF radios you can buy and they still have the interference problem. It is not an equipment problem. Secondly, there is also pending legislation to combine the recreational and commercial VHF frequencies which he feels is a disaster. In a place like Tampa where you have a lot of recreational craft, the airwaves will be flooded.

Captain Nesbitt suggested that a solicitation for comments on this issue be published in the Federal Register. He reports that his company has had problems with Channel 18 in Tampa and with Channels 13 and 79 in New York and they have fairly good equipment.

Captain Ralston concurred with Captain DeHart that it is not a matter of equipment. He doesn't consider his radio a piece of cheap equipment and shouldn't have to spend \$5,000 to get a better radio to solve the problem.

Don Sheetz said he believed the Connecticut pilots are having the same difficulty as was reported recently in their meeting minutes.

Captain Gould pointed out that he pilots a lot of foreign vessels and most of the time you are lucky if you have a good VHF radio that works. How do you get foreign flag vessels to comply if it is an equipment problem? They have not come across a handset yet that will deal with this problem. You can turn the radio on its side and it will eliminate the noise, but then you don't hear anything. Location of the transmitters, for example Algiers Point, is one of the worst things. You can't speak to traffic above that point.

Several motions were randomly made, but none were voted on. The Council agreed to take on this issue. Ms. Hegy agreed to keep the Council apprised of the Eighth District study and provide information as it becomes available so the Council can address the issue as new business at a future meeting.

B. Chairman Fugaro invited members to provide constructive feedback to Captain Sanborn on the article she drafted to clarify Rule 18. He also referred to a letter from the National Association of Maritime Educators which was received shortly before the Council meeting began. The writer, Richard Block, asked that certain things be considered by NAVSAC in discussing the amendments to SOLAS, Chapter V. The letter was given to Council members at the earliest opportunity but they did not have time to really review the letter. Chris Young indicated that the letter would be placed in the docket that the Coast Guard is using to develop the implementing regulations for the STCW revisions. Members of the Council were invited to pass along

comments on the letter, after they had time to review it, to Ms. Hegy who will pass it to the U.S. delegation or put it on a future NAVSAC agenda.

C. As a follow up to the panel presentation on river navigation and the application of ECDIS, Ms. Ann Adams expressed her view that there appears to be significant benefits and safety improvement to complete development of the system. In light of the funding problems which are delaying completion of the system, she urged the Council to consider some sort of statement of public support for completion of the development of DGPS for application on the inland river system. She presented the following resolution which was unanimously endorsed by the Council:

[95-22] The Council supports completion of the development of DGPS, for application to access on the inland river system, and urges that the priority of the project be elevated to an appropriate level, and that the necessary funding is obtained.

D. Captain Cattalini presented the following motion to the Council based on concerns expressed during the course of the meeting about the nautical chart program and the future of the Department of Commerce:

[95-23] Recognizing the importance of accuracy of nautical charts to the safety of navigation, NAVSAC requests that the Coast Guard furnish each NAVSAC member a timely report on current and proposed developments in the nautical charting field. This report should include:

- (1) Progress on updating obsolete, incomplete, or inaccurate information shown on charts;**
- (2) Progress on establishment, introduction and completion of ECDIS and electronic chart systems;**
- (3) Adequacy of funding levels for nautical charting;**
- (4) Reorganization proposals that would affect U.S. agencies currently responsible for nautical charting;**
- (5) Extent of U.S. compliance with international standards for charting and hydrography; and**
- (5) Risks of using new high-tech navigation devices that are dependent on potentially inaccurate, low-tech inputs.**

The motion passed unanimously and RADM Peschel agreed to try and

provide the information within thirty days to allow members ample time to digest before the next meeting. RADM Peschel believes this is a national issue and some prompting from NAVSAC could be helpful in getting this beyond a status report type of situation. Further discussion was tabled pending receipt of the report.

5. ADMINISTRATIVE MATTERS

The Council agreed that there is a need to merge the next NAVSAC meeting with the NBSAC meeting which is scheduled to be held in San Francisco, CA from April 27-29, 1996.

7. ADJOURNMENT

Chairman Fugaro adjourned the meeting at 4:30 p.m.

Prepared by:

Diane S. Appleby
Executive Secretary
Navigation Safety
Advisory Council

and

Margie G. Hegy
Executive Director
Navigation Safety
Advisory Council

Approved by:

Anthony Fugaro
Chairman
Navigation Safety
Advisory Council

APPENDIX I- ATTENDANCE LIST

NAVIGATION SAFETY ADVISORY COUNCIL
PLENARY SESSION-- NOVEMBER 10 & 11, 1995

Council members present:

H. Ann Adams	Mickey D. DeHart
Rodney Gregory	Allison Ross
Gretchen Grover	Reginald E. McKamie, Sr.
Michael P. Nesbitt	Charles R. Pillsbury
F. Eugene Reil	Ann Sanborn
Donald J. Sheetz	Stephen Hung
Gary Welsh	Alvin Cattalini
Anthony F. Fugaro	John Ralston

Council members absent:

Betty Hutto	Vincent J. Fumo
Pamela Hom	Martha R. Grabowski
Mitchell S. Stoller	

COAST GUARD AND PUBLIC ATTENDEES:

RADM Rudy K. Peschel, Chief, Office of Navigation Safety and Waterway Services, Sponsor.

Margie G. Hegy, Coast Guard, Executive Director.

Diane Schneider-Appleby, Coast Guard, Executive Secretary.

Captain Edwin Rollison, Coast Guard, Chief, Vessel Traffic Services Division.

Edward J. LaRue, Jr., Coast Guard, Chief, Navigation Rules and Information Branch, Vessel Traffic Services Division.

Randolph Doubt, Coast Guard Boating Standards Branch, Boating Safety Division.

Chris Young, Coast Guard Vessel Manning Branch, Merchant Vessel Personnel Division.

Harvey Wade, Canadian Coast Guard.

Vincent Rossi, Senator Fumo's office, Philadelphia, PA.

Lester Bedient, Crowley Marine Services, Oakland, CA.

Douglas A. Hard, U.S. Merchant Marine Academy, Kings Point, NY.

APPENDIX II- COMMITTEE MEETING ATTENDANCE LIST

NAVIGATION SAFETY ADVISORY COUNCIL
NOVEMBER 10-11, 1995

Committee: Barge Lighting

Chairman: Ann Sanborn

Members: Don Sheetz
Gene Reil

Ann Adams
Charles Pillsbury
Mickey DeHart

Coast Guard

Reps: Ed LaRue
Margie Hegy

Others: Lester C. Bedient
Diane Schneider-Appleby
Randolph J. Doubt

Committee: Human Factors in Navigation Safety

Chairman: Rodney Gregory

Members: Reginald McKamie
John Ra lston
Alvin Cattalini

Coast Guard

Rep: Chris Young

Others: Bill Kline
Harvey Wade

Committee Prevention Through People

Chairman: Michael Nesbitt

Members: Stephen Hung
Gretchen Grover
Gary Welsh
Allison Ross

Coast Guard

Reps: CAPT Ed Rollison
CDR Mark VanHaverbeke

Others: LT Chris Nettles
Captain Bob Luchun
Gary Frommelt
Vincent Rossi